SCHEDULE 2.3 TECHNICAL REFERENCE SCHEDULE

This <u>Schedule 2.3</u> consists of a list of Technical References included by the Parties in their predecessor interconnection agreement for Wisconsin. The Parties acknowledge and agree that many of these Technical References may be outdated, and that additional and/or modified Technical References may need to be incorporated into this <u>Schedule 2.3</u>. Further, some Technical References may need to be deleted from this <u>Schedule 2.3</u>. Pursuant to <u>Article II, Section 2.3</u>, the Parties agree to cooperate on the process of updating this list of necessary Technical References to include additional or modified Technical References that describe the practices, procedures and specifications for certain services (and the applicable interfaces relating thereto) to assist the Parties in meeting their respective responsibilities hereunder. Once updated, the Parties' list of Technical References shall be included in this <u>Schedule 2.3</u> via an amendment to the Agreement. Any disputes over the inclusion of a Technical Reference in <u>Schedule 2.3</u> shall be handled by the Parties using the dispute resolution process of <u>Section 28.3</u>.

Unbundled Network Elements

Unbundled Loop Transmission

Bellcore TA-NWT-000393 ANSI T1.413-1995 Specifications AM TR-TMO-000122 AM TR-TMO-000123

Bellcore TR-NWT-000393

ANSI T1.102-1993, American National Standard for Telecommunication - Digital Hierarchy - Electrical Interfaces

Bellcore Technical Requirement TR-NWT-000499, Issue 5, December 1993, section 7 ANSI T1.413-1995

ANSI T1E1 Committee Technical report Number 28

Local Switching

Bellcore FR-NWT-000064 (Local Switching Systems General Requirements)

Bellcore GR-1432-CORE (TCAP)

Bellcore GR-905-CORE (ISUP)

Bellcore GR-1429-CORE (Call Management)

Bellcore GR-1357-CORE (Switched Fractional DS1)

Bellcore GR-1428-CORE (Toll Free Service)

Bellcore GR-1597-CORE (Calling Name)

Bellcore GR-954-CORE (Line Information Database)

Bellcore GR-2863-CORE (Advanced Intelligent Network)

GR-1298-CORE, AIN Switching System Generic Requirements

GR-1299-CORE, AIN Switch-Service Control Point (SCP)/Adjunct Interface Generic Requirements

TR-NWT-001284, AIN 0.1 Switching System Generic Requirements

SR-NWT-002247, AIN Release 1 Update

ANSI standards Q.931, Q.932

Bellcore TR-NWT-08

Bellcore TR-NWT-303

TR-NWT-000393, January 1991, Generic Requirements for ISDN Basic Access Digital Subscriber Lines

Bellcore TR-NWT-303

Dedicated and Shared Transport

AM TR-NIS-000111

AM RT-NIS 000133

- ANSI T1.101-1994, American National Standard for Telecommunications Synchronization Interface Standard Performance and Availability
- ANSI T1.102-1993, American National Standard for Telecommunications Digital Hierarchy Electrical Interfaces
- ANSI T1.105-1995, American National Standard for Telecommunications Synchronous Optical Network (SONET) Basic Description including Multiplex Structure, Rates and Formats
- ANSI T1.105.01-1995, American National Standard for Telecommunications Synchronous Optical Network (SONET) Automatic Protection Switching
- ANSI T1.105.02-1995, American National Standard for Telecommunications Synchronous Optical Network (SONET) Payload Mappings
- ANSI T1.105.03-1994, American National Standard for Telecommunications Synchronous Optical Network (SONET) Jitter at Network Interfaces
- ANSI T1.105.03a-1995, American National Standard for Telecommunications Synchronous Optical Network (SONET): Jitter at Network Interfaces DS1 Supplement
- ANSI T1.105.04-1995, American National Standard for Telecommunications Synchronous Optical Network (SONET) Data Communication Channel Protocols and Architectures
- ANSI T1.105.05-1994, American National Standard for Telecommunications Synchronous Optical Network (SONET) Tandem Connection
- ANSI T1.106-1988, American National Standard for Telecommunications Digital Hierarchy Optical Interface Specifications (Single Mode)
- ANSI T1.107-1988, American National Standard for Telecommunications Digital Hierarchy Formats Specifications
- ANSI T1.107a-1990, American National Standard for Telecommunications Digital Hierarchy Supplement to Formats Specifications (DS3 Format Applications)
- ANSI T1.107b-1991, American National Standard for Telecommunications Digital Hierarchy Supplement to Formats Specifications
- ANSI T1.117-1991, American National Standard for Telecommunications Digital Hierarchy Optical Interface Specifications (SONET) (Single Mode Short Reach)

- ANSI T1.119-1994, American National Standard for Telecommunications Synchronous Optical Network (SONET) Operations, Administration, Maintenance, and Provisioning (OAM&P) Communications
- ANSI T1.119.01-1995, American National Standard for Telecommunications Synchronous Optical Network (SONET) Operations, Administration, Maintenance, and Provisioning (OAM&P) Communications Protection Switching Fragment
- ANSI T1.119.02-199x, American National Standard for Telecommunications Synchronous Optical Network (SONET) Operations, Administration, Maintenance, and Provisioning (OAM&P) Communications Performance Monitoring Fragment
- ANSI T1.231-1993, American National Standard for Telecommunications Digital Hierarchy Layer 1 In-Service Digital Transmission performance monitoring
- ANSI T1.403-1989, Carrier to Customer Installation, DS1 Metallic Interface Specification
- ANSI T1.404-1994, Network-to-Customer Installation DS3 Metallic Interface Specification
- Bellcore FR-440 and TR-NWT-000499, Transport Systems Generic Requirements (TSGR): Common Requirements
- Bellcore GR-820-CORE, Generic Transmission Surveillance: DS1 & DS3
 Performance
- Bellcore GR-253-CORE, Synchronous Optical Network Systems (SONET); Common Generic Criteria
- Bellcore TR-NWT 000507, Transmission, Section 7, Issue 5 (Bellcore, December 1993). (A module of LSSGR, FR-NWT-000064.)
- Bellcore TR-NWT-000776, Network Interface Description for ISDN Customer Access Bellcore TR-INS-000342, High-Capacity Digital Special Access Service-Transmission Parameter Limits and Interface Combinations, Issue 1, February 1991

Signaling Transfer Points (STPs)

ANSI T1.111.2

ANSI T1.111.3

ANSI T1.111.4

ANSI T1.112

ANSI T1.112.4

ANSI T1.118

ANSI T1.111.6

ANSI T1.112.5

- GR-2863-CORE, CCS Network Interface Specification Supporting Advanced Intelligent Network (AIN)
- GR-2902-CORE, CCS Network Interface Specification (CCSNIS) Supporting Toll-Free Service Using Advanced Intelligent Network (AIN)
- Bellcore GR-905-CORE, Common Channel Signaling Network Interface Specification (CCSNIS) Supporting Network Interconnection, Message Transfer Part (MTP), and Integrated Services Digital Network User Part (ISDNUP)

- Bellcore GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP)
- ANSI T1.111-1992, American National Standard for Telecommunications Signaling System Number 7 (SS7) Message Transfer Part (MTP)
- ANSI T1.111A-1994, American National Standard for Telecommunications Signaling System Number 7 (SS7) Message Transfer Part (MTP) Supplement
- ANSI T1.112-1992, American National Standard for Telecommunications Signaling System Number 7 (SS7) Signaling Connection Control Part (SCCP)
- ANSI T1.115-1990, American National Standard for Telecommunications Signaling System Number 7 (SS7) Monitoring and Measurements for Networks
- ANSI T1.116-1990, American National Standard for Telecommunications Signaling System Number 7 (SS7) Operations, Maintenance and Administration Part (OMAP)
- ANSI T1.118-1992, American National Standard for Telecommunications Signaling System Number 7 (SS7) Intermediate Signaling Network Identification (ISNI)
- Bellcore GR-905-CORE, Common Channel Signaling Network Interface Specification (CCSNIS) Supporting Network Interconnection, Message Transfer Part (MTP), and Integrated Services Digital Network User Part (ISDNUP)
- Bellcore GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP)

Service Control Points (SCPs)/Call-Related Databases

- SR-TSV-002275 (BOC Notes on the Ameritech Networks, SR-TSV-002275, Issue 2 (Bellcore, April 1994))
- GR-246-CORE, Bell Communications Research Specification of Signaling System Number 7, ISSUE 1 (Bellcore, December 1995)
- GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP). (Bellcore, March 1994)
- GR-954-CORE, CCS Network Interface Specification (CCSNIS) Supporting Line Information Database (LIDB) Service 6, Issue 1, Rev. 1 (Bellcore, October 1995)
- GR-1149-CORE, OSSGR Section 10: System Interfaces, Issue 1 (Bellcore, October 1995) (Replaces TR-NWT-001149)
- GR-1158-CORE, OSSGR Section 22.3: Line Information Database 6, Issue (Bellcore, October 1995)
- GR-1428-CORE, CCS Network Interface Specification (CCSNIS) Supporting Toll Free Service (Bellcore, May 1995)
- BOC Notes on Ameritech Networks, SR-TSV-002275, ISSUE 2 (Bellcore, April 1994) GR-1280-CORE, AIN Service Control Point (SCP) Generic Requirements Tandem Switching

Bellcore TR-TSY-000540, Issue 2R2, Tandem Supplement, 6/1/90

GR-905-CORE

GR-1429-CORE

GR-2863-CORE

GR-2902-CORE

Performance Standards

Bellcore FR-64, LATA Switching Systems Generic Requirements (LSSGR)

Bellcore TR-NWT-000499, Issue 5, Rev 1, April 1992, Transport Systems Generic Requirements (TSGR): Common Requirements

Bellcore TR-NWT-000418, Issue 2, December 1992, Generic Reliability Assurance Requirements For Fiber Optic Transport Systems

Bellcore TR-NWT-000057, Issue 2, January 1993, Functional Criteria for Digital Loop Carriers Systems

Bellcore TR-NWT-000507, Issue 5, December 1993, LSSGR - Transmission, Section 7

Bellcore TR-TSY-000511, Issue 2, July 1987, Service Standards, a Module (Section 11) of LATA Switching Systems Generic Requirements (LSSGR, FR-NWT-000064)

Bellcore TR-NWT-000393, January 1991, Generic Requirements for ISDN Basic Access Digital Subscriber Lines

Bellcore TR-NWT-000909, December 1991, Generic Requirements and Objectives for Fiber In The Loop Systems

Bellcore TR-NWT-000505, Issue 3, May 1991, LSSGR Section 5, Call Processing Bellcore LSSGR TR-TSY-000511

Bellcore TR-NWT-001244, Clocks for the Synchronized Network: Common Generic Criteria

ANSI T1.105-1995

Network Interface Device

Bellcore Technical Advisory TA-TSY-000120, "Customer Premises or Network Ground Wire"

Bellcore Generic Requirement GR-49-CORE, "Generic Requirements for Outdoor Telephone Network Interface Devices"

Bellcore Technical Requirement TR-NWT-00239, "Indoor Telephone Network Interfaces"

Bellcore Technical Requirement TR-NWT-000937, "Generic Requirements for Outdoor and Indoor Building Entrance"

Interconnection

Trunking Interconnection

GR-317-CORE, Switching System generic requirements for Call Control Using the Integrated Services Digital Network User Part (ISDNUP), Bellcore, February, 1994

- GR-394-CORE, Switching System generic requirements for Interexchange Carrier Interconnection Using the Integrated Services Digital Network User Part (ISDNUP), Bellcore, February, 1994
- FR-NWT-000064, LATA Switching Systems Generic Requirements (LSSGR), Bellcore, 1994 Edition
- ANSI T1.111
- ANSI T1.112
- ANSI T1.113
- Bellcore GR-905-CORE, Common Channel Signaling Network Interface Specification (CCSNIS) Supporting Network Interconnection, Message Transfer Part (MTP), and Integrated Services Digital Network User Part (ISDNUP)
- Bellcore GR-1428-CORE, CCS Network Interface Specification (CCSNIS) Supporting Toll-Free Service
- Bellcore GR-1429-CORE, CCS Network Interface Specification (CCSNIS) Supporting Call Management Services
- Bellcore GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP)
- ANSI T1.110-1992, American National Standard Telecommunications Signaling System Number 7 (SS7) General Information;
- ANSI T1.111-1992, American National Standard for Telecommunications Signaling System Number 7 (SS7) Message Transfer Part (MTP)
- ANSI T1.111A-1994, American National Standard for Telecommunications Signaling System Number 7 (SS7) Message Transfer Part (MTP) Supplement
- ANSI T1.112-1992, American National Standard for Telecommunications Signaling System Number 7 (SS7) Signaling Connection Control Part (SCCP)
- ANSI T1.113-1995, American National Standard for Telecommunications Signaling System Number 7 (SS7) Integrated Services Digital Network (ISDN) User Part
- ANSI T1.114-1992, American National Standard for Telecommunications Signaling System Number 7 (SS7) Transaction Capabilities Application Part (TCAP)
- ANSI T1.115-1990, American National Standard for Telecommunications Signaling System Number 7 (SS7) Monitoring and Measurements for Networks
- ANSI T1.116-1990, American National Standard for Telecommunications Signaling System Number 7 (SS7) Operations, Maintenance and Administration Part (OMAP)
- ANSI T1.118-1992, American National Standard for Telecommunications Signaling System Number 7 (SS7) Intermediate Signaling Network Identification (ISNI)
- Bellcore GR-905-CORE, Common Channel Signaling Network Interface Specification (CCSNIS) Supporting Network Interconnection, Message Transfer Part (MTP), and Integrated Services Digital Network User Part (ISDNUP)
- Bellcore GR-954-CORE, CCS Network Interface Specification (CCSNIS) Supporting Line Information Database (LIDB) Service
- Bellcore Special Report SR-TSV-002275, BOC Notes on the LEC Networks-Signaling Ameritech Supplement AM-TR-OAT-000069, Common Channel Signaling Network Interface Specifications

Bellcore Standard FR-NWT-000476 ANSI Standard T1.206

Electrical/Optical Interfaces

- Bellcore Technical Publication TR-INS-000342, High Capacity Digital Special Access Service, Transmission Parameter Limits and Interface Combinations;
- Ameritech Technical Publication TR-NIS-000111, Ameritech 0C3, 0C12 and 0C48 Service Interface Specifications; and
- Ameritech Technical Publication AM-TR-NIS-000133, Ameritech 0C3, 0C12 and 0C48 Dedicated Ring Service Interface Specifications.

Collocation

- Bellcore Network Equipment Building Systems (NEBS) standards TR-EOP-000063 National Electrical Code (NEC) use latest issue
- TA-NPL-000286, NEBS Generic Engineering Requirements for System Assembly and Cable Distribution, Issue 2 (Bellcore, January 1989)
- TR-EOP-000063, Network Equipment-Building System (NEBS) Generic Equipment Requirements, Issue 3, March 1988
- TR-NWT-000840, Supplier Support Generic Requirements (SSGR), (A Module of LSSGR, FR-NWT-000064), Issue 1 (Bellcore, December 1991)
- TR-NWT-001275 Central Office Environment Installations/Removal Generic Requirements, Issue 1, January 1993
- Institute of Electrical and Electronics Engineers (IEEE) Standard 383, IEEE Standard for Type Test of Class 1 E Electrical Cables, Field Splices, and Connections for Nuclear Power Generating Stations
- National Electrical Code (NEC) use latest issue
- TA-NPL-000286, NEBS Generic Engineering Requirements for System Assembly and Cable Distribution, Issue 2 (Bellcore, January 1989)
- TR-EOP-000063, Network Equipment-Building System (NEBS) Generic Equipment Requirements, Issue 3, March 1988
- TR-EOP-000151, Generic Requirements for 24-, 48-, 130- and 140- Volt Central Office Power Plant Rectifiers, Issue 1 (Bellcore, May 1985)
- TR-EOP-000232, General Requirements for Lead-Acid Storage Batteries, Issue 1 (Bellcore, June 1985)
- TR-NWT-000154, General Requirements for 24-, 48-, 130-, and 140- Volt Central Office Power Plant Control and Distribution Equipment, Issue 2 (Bellcore, January 1992)
- TR-NWT-000295, Isolated Ground Planes: Definition and Application to Telephone Central Offices, Issue 2 (Bellcore, July 1992)
- TR-NWT-000840, Supplier Support Generic Requirements (SSGR), (A Module of LSSGR, FR-NWT-000064), Issue 1 (Bellcore, December 1991)
- TR-NWT-001275, Central Office Environment Installations/Removal Generic Requirements, Issue 1, January 1993
- Underwriters' Laboratories Standard, UL 94